

Application Serial Number 10/536,637
Response to Office Action
Dated February 29, 2008

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2. Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A device having biomolecular binding sites for a biomolecule, comprising:

a resonance circuit, said resonance circuit comprising a resonance frequency (f) determining sensor element or being electrically coupled to a resonance frequency determining sensor element, a remote power transmission element, which receives power and provides electrical power to the device, wherein binding at the biomolecular binding sites affects a physical property of the resonance frequency determining sensor element and thereby the resonance frequency, and a circuit, which is separate from the remote power transmission element, for RF communication of an RF signal in dependence of the resonance frequency of the resonance circuit.

2. (Previously Presented) A device as claimed in claim 1, wherein at the remote power transmission element comprises a photodiode.

3. (Previously Presented) A device as claimed in claim 1, wherein the remote power transmission element comprises a coil for receiving RF power whereby the remote power transmission element is arranged for receiving an RF frequency different from the resonance frequency.

4. (Previously Presented) A device as claimed in claim 1, wherein the sensor element forms a part of the resonance frequency circuit.

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5. (Previously Presented) A device as claimed in claim 4, wherein the sensor element forms part of a voltage or current supplying circuit, coupled to the resonance circuit, wherein the voltage (V) or current (I) of the supplying circuit is dependent on the physical property of the sensor element, and the resonance frequency (f) of the resonance circuit is dependent on said voltage (V) or current (I).
6. (Previously Presented) A device as claimed in claim 1, wherein the sensor element is a magnetoresistive element.
7. (Previously Presented) A device as claimed in claim 3, wherein the sensor elements are resistive elements provided in a bridge configuration.
8. (Previously Presented) A device as claimed in claim 2, the sensor elements are located on the surface of an on-chip Surface Acoustic Wave/Bulk Acoustic Wave (SAW/BAW) resonator which is part of the oscillator circuit.
- 9-13. (Cancelled).